



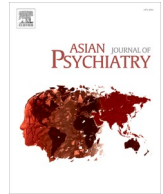
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# What can we do for people exposed to multiple traumatic events during the coronavirus pandemic?

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As the world increasingly deals with the COVID-19 pandemic, other disasters (e.g., earthquakes, floods, fires, and tornadoes) or public health emergencies (e.g., influenza in America) have simultaneously occurred in some countries. These events pose serious threats to the public and have resulted in a great loss of life and property. For example, by March 21, 2020, 15 earthquakes had occurred in China during the COVID-19 outbreak, increasing the fears, concerns, and anxiety of more than 1.4 billion Chinese people about natural disasters and public health emergencies (China Earthquake Administration, 2020). Flash floods, bush-fires, and dust storms have occurred in Australia, killing at least 33 people and more than a billion animals, and destroying nearly 11 million hectares of land and thousands of homes (British Broadcasting Corporation, 2020). In America, more than 19 million people contracted severe flu, resulting in more than 10,000 deaths and 180,000 hospitalizations (Bursztynsky, 2020). Furthermore, tornadoes have killed at least 25 people across 4 counties in Tennessee (Wadhvani et al., 2020).

Essential trauma care should be implemented for people exposed to multiple traumatic events during the COVID-19 outbreak. The WHO's guidelines for essential trauma care states that to minimize the negative effects of trauma on survivors, essential aspects must be considered in the treatment process (World Health Organization (WHO), 2004). First, to minimize the mortality rate, life-threatening injuries should be properly and promptly treated as a priority. Second, potentially disabling injuries should be rapidly detected and treated to reduce functional impairment and ensure a quick return to normal life. Third, experienced health professionals should be assigned to provide trauma health care for people in need, which could increase the effectiveness and efficiency of treatment. Finally, management models of disaster or public health emergencies should be developed focusing on the phases of mitigation, preparedness, response, and recovery, which could better ensure the various measures and assistance to victims conducted in an

efficient, well-sequenced and coordinated manner.

After experiencing multiple traumatic events simultaneously, many people may feel great dread, loneliness, and frustration from losing their family, or as a result of injuries, fatalities, and broader financial burdens (World Health Organization (WHO), 2004). Appropriate psychological support should be implemented for people exposed to multiple traumatic events during this period. Some approaches used in the Severe Acute Respiratory Syndrome (SARS) outbreak could be considered to resolve psychiatric distress emerging during COVID-19 (Mauder et al., 2003). First, traditional psychological services (e.g., face-to-face counseling) is unavailable for isolated people during the COVID-19 outbreak. Online trauma-focused psychological support (e.g., psychological cyber-counseling, hotlines, and smartphone-based treatments) should be provided for people in need. Second, to reduce negative feelings of uncertainty and insecurity, the government should ensure information transparency and timely updates on COVID-19 in addition to potentially traumatic events via media platforms (e.g., news channels, Facebook, Instagram, Twitter, and WeChat). Third, trauma influences not only the individual survivor but also families and communities. Professional health workers are encouraged to provide more psychological support, guidance, treatment, intervention, and information about trauma via safe methods, as culturally appropriate. Finally, the International Society of Traumatic Stress Studies (International Society for Traumatic Stress Studies (ISTSS), 2018) and American Psychological Association (American Psychological Association, 2017) suggest to continually track the mental health status for survivors and provide well-timed evidence-based trauma-focused psychotherapies, such as Cognitive Behavioral Therapy, Cognitive Processing Therapy, Cognitive Therapy, and Prolonged Exposure Therapy, when the situation has stabilized.

As trauma-informed mental health care system remains underdeveloped and incomplete in many countries, some areas could be considered for improvement to ensure appropriate professional help for

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people with mental disorders. Previous researchers recommended (1) expanding training and education of health specialists in different cultural contexts (Fang et al., 2019; Yao et al., in press); (2) actively interacting with and coordinating with various stakeholders and social network supports to strengthen, early identification of mental disorders (Zandifar and Badrfam, 2020); (3) further encouraging help-seeking behaviors to reduce the stigma and marginalization via social media resources, such as TV commercials, Wechat, and Facebook (Banerjee, in press).

By February 27, 2020, 852 academic publications on COVID-19 had been published globally (World Health Organization (WHO), 2020), but few focused on the influence of other traumatic events on populations. As the world is highly concerned with COVID-19, the additional influences of other traumatic events could be overlooked. Thus, research should explore the impact of these traumatic events occurring during the outbreak. Epidemiological surveys on mental disorders, trauma-informed care, professional help-seeking, and related barriers should be conducted among various populations affected by multiple traumatic events during the COVID-19 outbreak. These findings may contribute to coordinating and aligning response programs and treatment models beyond national priorities. Finally, health authorities should consider the research and treatment programs used in previous public health emergencies (e.g., SARS in 2003) and traumatic events (e.g., the 2008 Great Wenchuan Earthquake) to improve the response to the challenges due to traumatic events occurring contemporaneously with the COVID-19 outbreak.

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#### Declaration of Competing Interest

The authors have no conflicts of interest.

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